



**Calhoun: The NPS Institutional Archive**  
**DSpace Repository**

---

Graduate School of Defense Management (GSDM)

Manpower Systems Analysis Thesis Day Programs and Documents

---

2014-03

# A Quarterly Update on NPS MPTE- Related Theses May 22, 2014 Covering students graduating from Jan-March 2014 By Categories

Monterey, California, Naval Postgraduate School

---

<http://hdl.handle.net/10945/67637>

---

This publication is a work of the U.S. Government as defined in Title 17, United States Code, Section 101. Copyright protection is not available for this work in the United States.

*Downloaded from NPS Archive: Calhoun*



Calhoun is the Naval Postgraduate School's public access digital repository for research materials and institutional publications created by the NPS community. Calhoun is named for Professor of Mathematics Guy K. Calhoun, NPS's first appointed -- and published -- scholarly author.

**Dudley Knox Library / Naval Postgraduate School**  
**411 Dyer Road / 1 University Circle**  
**Monterey, California USA 93943**

<http://www.nps.edu/library>

## A Quarterly Update on NPS MPTE- Related Theses

May 22, 2014

Covering students graduating from Jan-March 2014

By Categories

### **Diversity**

#### **Transgenders in the U.S. military: policies, problems, and prospects, Mendez, Endia T**

This study explores the policies, problems, and prospects related to transgenders serving in the U.S. military. Also examined is the trend toward changing medical classifications of transgender, resulting from revised perspectives by the world's most authoritative sources. The study concludes that medical reasons for excluding transgenders from the U.S. military are inconsistent with prevailing views. Several areas for further research are recommended.

<http://hdl.handle.net/10945/41418>

#### **Analysis of the pull-up requirement in the U.S. Marine Corps physical fitness test for female Marines, Ryan, Sherel**

This study is fact-finding and seeks to evaluate the PFT policy change for female Marines. It analyzes how well the Marine Corps prepared for and executed this change in terms of expectations and in preparing female Marines for success, as well as in anticipating second- and third-order effects of the new PFT requirement within the eastern recruiting region (ERR). The study compares and contrasts the policy change with federal fitness guidelines, state-run occupational fitness standards, and implementation of the Marine Corps Combat Fitness Test in 2008. The study also evaluates the training program published by Headquarters Marine Corps for females to build their upper-body strength. The study highlights certain consequences of the policy change and recommends further research. <http://hdl.handle.net/10945/41438>

### **Communication**

#### **It is not just a press conference: the consequences of crisis communication while the world watches, Huston, Kelly B**

This thesis examines the public information methods used by officials in two high-profile criminal cases that unfolded before live television news cameras over the course of several days in 2013: the Boston Marathon bombings and the nine-day manhunt for former Los Angeles Police Department Officer Christopher Dorner in the greater southern California area. Best practices in risk and crisis communication are identified through a review of the literature and are used as the basis for analyzing each case study. The findings lead to four key crisis communication recommendations for public officials: recognizing the importance of empathy

and compassion in trust building, focusing specifically on crisis communication best practices for leadership, emphasizing the importance of building pre-event partnerships, and differentiating the tactics from the strategic. <http://hdl.handle.net/10945/41393>

**Operationalizing mobile applications for humanitarian assistance/disaster relief missions,** Summerville, Carlton B.

This research assesses the implementation of applications used on mobile devices while enhancing the ICT of the disaster area for first responders during HA/DR missions. This includes a setup of a hastily formed network in order to establish a wide area network to provide a network for the applications to work. The use of such applications can drastically improve information sharing, interoperability, command and control, and coordination among responders between all agencies involved. <http://hdl.handle.net/10945/41449>

**Career Progression**

**An Analysis of Closed Loop Detailing in the Naval Helicopter Community,** Crawford, Earl

This study examines the costs and benefits of retaining pilots in specialized squadrons for subsequent tours. Analyses are conducted of the current manpower and personnel distribution processes, and the development of funded requirements. Training cost estimates are reviewed, and historical helicopter pilot data are used to develop a steady-state Markov model capable of developing career progression data. <http://hdl.handle.net/10945/41363>

**United States Marine Corps career designation board: significant factors in predicting selection,** Garza, Raul P.

We provide statistical analysis of what factors impact the officer's likelihood of being CD in each of the competitive subcategories of: combat arms, combat service support, aviation-ground, law, and aviation. We find that Reviewing Officer Relative Value Average is the most significant factor for most of the officers, as it increases the marginal probability of being CD by an average of 60 percentage points. Surprisingly, combat deployments were not consistently significant throughout the competitive categories. Finally, we develop an Excel-based interactive CD counseling tool, which provides the probability of the officer being CD, given the officer's individual characteristics. <http://hdl.handle.net/10945/41381>

**Retention**

**Maximizing Female Retention in the Navy,** Ceralde, Clinton; Czepiel, Christopher

This study estimates Navy female officer retention probabilities and identifies individual-level attitudes and perceptions for particular designator categories with female representation in order to better understand the effects of occupation assignment and retention policies. Our survey findings confirm that for some occupations, the perception of women with regards to

factors such as career plateau and turnover intention are affected by the proportion of women within their occupational grouping. <http://hdl.handle.net/10945/41356>

## **Attrition**

### **Evaluating the tailored adaptive personality assessment system on delayed entry program attrition, Turpin, Adam**

This thesis estimates whether the TAPAS scores predict recruit attrition in the Delayed Entry Program (DEP), while controlling for schooling, AFQT scores, and demographics. Indeed, the analysis finds that several TAPAS facets are significant predictors of attrition behavior. In particular, dominance, intellectual efficiency, order, adventure seeking, commitment to serve, and situational awareness are significant predictors of DEP attrition. Additionally, conduct waivers proved to be significant predictors of DEP attrition, with alcohol and drug waivers having the largest effects. <http://hdl.handle.net/10945/41454>

### **The effect of different enlistment ages on first-term attrition rate, Seker, Erdal; Ibis, Emrah**

This thesis analyzes the effects of different enlistment age on the first-term attrition for U.S. Army, Navy, Air Force, and Marine Corps enlisted personnel with non-prior service and prior service that attrited between fiscal years of 1995 and 2013. The study concluded that enlistment ages do significantly affect the attrition of enlisted personnel. This effect varies across different time periods'the first six months, the second six months, the second year, and 45-months'and different forces. <http://hdl.handle.net/10945/41442>

## **Recruiting**

### **The Effects of Incentives on Recruiter Productivity, Ortiz, Luis V.**

The objective of this research is to gain a greater understanding of how various incentives, both non-monetary and monetary, can impact recruiter productivity. Towards this end, I developed and administered a survey that was applied to most NRDs and elicited preferences for various monetary and non-monetary incentive schemes. <http://hdl.handle.net/10945/41426>

### **Why Conscription, Singapore? The social and geostrategic considerations, Kwok, Daniel J.**

This thesis analyzes the reasons for Singapore's continued use of conscription in a world where other developed countries have transitioned toward all-volunteer forces. This insight could provide alternative options for countries seeking to maintain conscription, as well as reframe the civil-military discourse about conscription. <http://hdl.handle.net/10945/41408>

### **A Markov model for forecasting inventory levels for Navy Medical Service Corps healthcare administrators, Josiah, Sobondo**

This thesis develops a Markov model to estimate the number of HCA accessions necessary to meet inventory requirements from FY14 to FY18. <http://hdl.handle.net/10945/41401>

**An analysis of Navy Nurse Corps accession sources, Harvie, Christopher L.**

This study analyzes the various Navy Nurse Corps (NC) accession sources for associated costs and retention rates for cohorts accessed between FY00 and FY13. The study finds that the most expensive accession source is the STA-21 program with a total cost of \$196,744. Further findings show the least expensive accession source is Direct Procurement with a total cost of \$25,000 per accession. However, the STA-21 program had the highest retention rate at six years at 91.23 percent. The NROTC program had the lowest retention rate at six years at 54.62 percent. The data analyzed in this research suggests that Bureau of Medicine should re-consider the NROTC NC program option due to high attrition.

**Personnel Readiness (Health of the Force)**

**An analysis of the role of service-specific risk factors in active duty Navy suicides, Golliday, James B.**

This thesis analyzes the role of service-specific risk factors in active duty U.S. Navy suicides from 2002 to 2012. I find enlisted supply ratings and enlisted non-moral accession waivers exhibit higher odds of suicide, while undesignated enlisted ratings, enlisted submarine and aircraft carrier assignments, and officer surface designators exhibit lower odds of suicide. I also find enlisted rates, officer ranks, and combat zone deployment status are not statistically significant risk factors of suicide in the active duty. <http://hdl.handle.net/10945/41384>

**Cost Efficiencies**

**Optimization of Daily Flight Training Schedules, Jacobs, Roger S.**

This research develops Flight Training Scheduler (FTS), an optimization-based tool, to aid the SKEDSO in production of daily flight schedules. FTS allows the SKEDSO to place an objective, value-oriented metric on the total events scheduled. FTS provides fast, automated guidance to the SKEDSOs that can help them increase throughput of students in the advanced strike training syllabus. <http://hdl.handle.net/10945/41396>

**Innovation**

**A case study of introducing innovation through design, Johnston, Kevin L; Featherstone, Robert W.**

In September of 2013, senior submarine officers from across the United States Navy Submarine Force converged on Naval Station Pearl Harbor to participate in a collaborative, design thinking

workshop. The result of the forum was 11 innovative solutions to improve command effectiveness. As more of the problems of the world continue to become wicked, it is ever more important to have the ability to generate solutions using a collaborative approach to leverage the wisdom and creativity of the collective. While this technique is useful for determining unique solutions to complex problems, actually incorporating those solutions into an existing organization requires skillful execution of change management. <http://hdl.handle.net/10945/41398>

## **Civilian Sector**

### **Quantitative and qualitative hiring freeze outcomes at the U.S. Army mission and installation contracting command, Evans, Jacqueline; Hatch, Ezra.**

This study focuses on hiring freezes and how they affect organizations in the Department of Defense (DoD), specifically the Army Missions and Installation Contracting Command (MICC). This paper discusses potential consequences and the effects of hiring freezes on the MICC. The elements studied included attrition, promotion, and productivity during periods when a DoD hiring freeze was in effect and periods when organizations were permitted to fill vacant staff positions. Additionally, an online survey was conducted to gauge the MICC employees' current perceptions of their working environment. <http://hdl.handle.net/10945/41374>

## **Retirement Reform**

### **Military retirement reform: An Australian perspective, Crockett, Adam**

This paper conducts a qualitative review of the Australian and U.S. public, private, and military retirement paradigm and draws out similarities and lessons that can be learned, such as avoiding the complexity that has arisen in the Australian military retirement system. A quantitative analysis is then conducted on the last cohorts of the old U.S.-style retirement system and the first cohorts of the new system. Though the new system was found to change behaviors and produce a smoother separation profile it also raised questions about the effectiveness of retention bonuses and grandfathering. <http://hdl.handle.net/10945/41364>